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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/574,831

12/19/2006

Thomas Giering

GIER3008/JEK

5012

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625 SLATERS LANE

FOURTH FLOOR

ALEXANDRIA, VA 22314-1176

EXAMINER

KOSLOW, CAROL M

ART UNIT

PAPER NUMBER

1793

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/574,831	<b>Applicant(s)</b> GIERING ET AL.	
	<b>Examiner</b> C. Melissa Koslow	<b>Art Unit</b> 1793	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. ____.                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>4/6/06</u> .  | 6) <input type="checkbox"/> Other: ____.                          |

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WO 01/48311; EP 1182048 and WO 02/070279 cited in the information disclosure statement have been considered with respect to the provided English abstracts. EP 66854 cited in the information disclosure statement have been considered with respect to the explanation given in the provided search report. EP 53124, DE 10120818, EP 659935 and EP 52624 cited in the information disclosure statement have been considered with respect to the discussion of these references in the specification.

The disclosure is objected to because of the following informalities:

It is unclear what applicants mean by “a coding”. The teachings in paragraphs 17 and 21-36 define where the pair of luminescent substances can be present in a value document, but they do not define “a coding”. Paragraph 12 teaches the host can be formed by a mixed crystal. It is unclear what is meant by this. Furthermore it is unclear what is meant by “complemented characteristically” and “complementarily overlap”. The use of “complement” and “complementarily” in the specification do not correspond to these terms conventional meanings.

Appropriate correction is required.

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

This claim appears to encompass two different statutory classes of invention set forth in 35 U.S.C. 101, which is drafted so as to set forth the statutory classes of invention in the alternative only. See MPEP 2173.05(p).

The following is a quotation of the first paragraph of 35 U.S.C. 112:

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The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 17 and 18 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 17 teaches a second luminescent substance which likewise emits in the subrange and is complemented characteristically with the emission spectra of the first and/or second luminescent substance. Paragraph 18 teaches further or other luminescent substances which likewise emits in the subrange and is complemented characteristically with the emission spectra of the first and/or second luminescent substance. Thus the paragraph teaches the coding includes substances which are different from the first and second substances of the pair. The teachings in paragraph 18 and the subject matter of claim 17 are different and this difference between what is taught and what is claimed need to be resolved. The subject matter of claim 18 is nowhere found in the specification. The specification teaches values documents comprising the at least one pair of mutually associated luminescent substances, but not there is no teaching of a system comprising at least one pair of mutually associated luminescent substances and value documents comprising at least one of the substances that make up the pair.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1-17 are indefinite since it is unclear what is meant by "a coding". Claim 2 recites the broad recitation about 750 nm to about 2500 nm and the claim also recites about 800 nm to about 2200 nm and about 1000 nm to about 1700 nm which are the narrower statement of the range/limitation. This claim is indefinite since it results in undue multiplicity. Claim 8 is indefinite since it is unclear what is meant that the host is formed by a mixed crystal. Claim 15 recites the limitation "the coding system". There is insufficient antecedent basis for this limitation in the claim or in claim 1 from which it depends. Claim 17 is indefinite since it teaches two second luminescent substances and thus it is unclear if the second substance in line 2 of the claim is the same as that in line 4. Claim 18 is indefinite since it is unclear what is meant by "a coding system". In addition, this claim does not appear to be one of the U.S. acceptable "system" type claims which is directed to a combinations of related apparatus, a combination of related processes, a combinations of relates articles or a combination of related compositions. In this case, the system appears to be a combination of a composition and a unrelated article and thus appears to be directed to two different statutory classes of invention set forth in 35 U.S.C. 101. Claims 1, , 17 and 18 are indefinite since it is unclear what is meant by "complemented characteristically". Claims 10 and 11 are indefinite since it is unclear what is meant by "complementarily overlap". Finally. Claim 16 is indefinite since it is unclear what is meant by "overlap each other complementarily".

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This application reveals that it includes terminology which is so indefinite and different from that which is generally accepted in the art to which this invention pertains that a proper search of the prior art cannot be made.

U.S. patent 5,763,891 is cited as of interest since it teaches a marking composition comprising at least two luminescent substances which both emit substantially the same wavelengths in the near infrared wavelength range. U.S. patents 4,202,491 and 6,344,261 are cited as of interest since they teach luminescent substances which emit s wavelengths in the near infrared wavelength range. U.S. patent 4,013,490 is cited as of interest since it shows that at the time of invention it was known to multiple luminescent materials with different emission spectra in security marking compositions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melissa Koslow whose telephone number is (571) 272-1371. The examiner can normally be reached on Monday-Friday from 8:00 AM to 3:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jerry Lorengo, can be reached at (571) 272-1233.

The fax number for all official communications is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/cmk/  
August 14, 2008

/C. Melissa Koslow/  
Primary Examiner  
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